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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,035	07/08/2003	Jin Wu	VIN 213	6713

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EXAMINER

VORTMAN, ANATOLY

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,035

Applicant(s)

WU, JIN

Examiner

Anatoly Vortman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/8/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: claim contains two sentences. According to the USPTO practice, a claim must be written only in one sentence. Appropriate correction is required. Claim also recites limitations having improper antecedent basis, for example “the main circuit”, “the safety protecting device”, etc.

The claims appear to be a literal translation from a foreign document, therefore the Applicant is thereby advised to review all of the claims for the presence of similar problems.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim provides for the use of the decorative lighting but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

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Claim is also rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 7-11, are rejected under 35 U.S.C. 102(b) as being anticipated by US/6,225,610 to Walsh.

Walsh disclosed (Fig. 6) a lighting system with a safety protecting device, which includes: “a main circuit (7), a branch circuit connected to the main circuit (7) and the lighting (123) installed in the branch circuit, the lighting features that there are a self-restoring polymer PTC protecting devices (170-175, 201-213, 2, 12) (i.e. self-mending fuse) installed in the main and branch circuits.

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh in view of US/4,720,759 to Tabei.

Walsh disclosed all, but bimetallic fuses.

Tabei disclosed (Fig. 1-4) a bimetallic circuit protector for prevention of both the excess current and the excessive rise of temperature (column 1, lines 15+).

It would have been obvious to a person of ordinary skill in the circuit protector art at the time the invention was made to substitute polymer PTC protection devices of Walsh with bimetallic protectors as taught by Tabei in order to provide protection from both the excess current and the excessive rise of temperature.

8. Alternatively, claims 1-5 and 8-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over US/6,163,113 to Fu in view of either US/6,489,879 to Singh et al. (Singh) or US/2,258,646 to Grisdale.

Fu disclosed (Fig. 2, 3) a decorative lighting with fuses (1) installed in main circuit (Fig. 2) and in branch circuits (Fig. 3), but did not disclose that said fuses are PTC polymer self-mending fuses.

Singh (Fig. 2) and Grisdale (Fig. 2) both teach PCT self-mending (self-restoring) fuses for protection of electrical circuits.

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It would have been obvious to a person of ordinary skill in the circuit protector art at the time the invention was made to substitute said conventional fuses of Fu with polymer self-mending PTC fuses as taught by either Singh or Grisdale in order to avoid the replacement of burned fuses of Fu.

9. All claims 6, 12, and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fu taken with either Singh or Grisdale as applied to claims 1 and 8 above, and further in view of Tabei.

Fu taken with either Singh or Tabei disclosed all, but bimetallic fuses.

Tabei disclosed (Fig. 1-4) a bimetallic circuit protector for prevention of both the excess current and the excessive rise of temperature (column 1, lines 15+).

It would have been obvious to a person of ordinary skill in the circuit protector art at the time the invention was made to substitute polymer PTC protection devices in combinations of Fu and Singh or Fu and Grisdale with bimetallic protectors as taught by Tabei in order to provide protection from both the excess current and the excessive rise of temperature.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

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US/1728939, 2461962, 3274441, 3789211, 4075614, 4223248, 4350407, 4425605, 4462065, 4462066, 5777868, 5939839, 6091204, 6424096, 6157139, 4227228, and GB/2045415 disclosed decorative lighting systems and overload protection arrangements for such systems.

US/6104587 and 5663861 disclosed PTC protectors.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 571-272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anatoly Vortman
Primary Examiner
Art Unit 2835

AV

